#### CITY OF MT. SHASTA

#### CLASS TITLE: LEAD WASTEWATER TREATMENT PLANT OPERATOR

#### **BASIC FUNCTION:**

Under the direction of the Public Works Director, lead and participate in wastewater treatment plant and facilities operations and activities involved in maintaining safe and proper wastewater quality; oversee and participate in related sample collection activities, equipment monitoring functions, and laboratory tests and analyses; train and provide work direction and guidance to assigned personnel.

## **REPRESENTATIVE DUTIES:**

## **ESSENTIAL DUTIES:**

Lead and participate in wastewater treatment plant and facilities operations and activities involved in maintaining safe and proper wastewater quality; encourage employees to comply with established standards, requirements, laws, codes, regulations, policies and procedures.

Oversee and participate in the collection of wastewater samples to identify concentrations of chemical, physical and biological characteristics in accordance with established requirements and procedures; prepare and set up glass tubes and bottles for sample testing and analysis.

Lead and conduct lab tests and analyses to identify wastewater quality levels; utilize a variety of laboratory equipment including DO meters, pH meters, ovens, lab scales, autoclaves, filters, incubators and various instruments and hand tools.

Inspect and monitor equipment, gauges and meters at treatment plants, pump stations and other facilities to identify wastewater quality levels; calibrate, modify and adjust equipment in response to wastewater quality characteristics.

Train and provide work direction and guidance to assigned personnel; assign employee duties and review work for accuracy, completeness and compliance with established standards and procedures; provide input concerning employee hiring and evaluations as requested.

Monitor wastewater treatment plant operations to assure smooth and efficient operations; interpret and record meter, gauge and other monitoring equipment readings, and test and analysis results to assure plant is meeting daily requirements; perform calculations as needed.

Oversee and participate in the preparation and compilation of various records and logs related to samples, readings, results, dates, times, maintenance, repairs and assigned duties; evaluate data and prepare reports for the City and State; assure accurate and timely maintenance of logs and records.

Assure proper functioning of plant and facility systems and equipment; inspect, troubleshoot and diagnose related problems and malfunctions; repair or replace gauges, pumps, filters and various other controls, parts and equipment as necessary; recommend major repairs as appropriate.

**Updated November 26, 2007 Ewing Consulting Services** 

Maintain and collect samples from lakes, rivers and wastewater ponds; assure accuracy of water quality readings and test and analysis results; develop related procedures to enhance accuracy and efficiency; assist with developing schedules and time lines.

Oversee and participate in the application of chlorine and other wastewater treatment-related chemicals to adjust wastewater quality as required.

Monitor inventory levels of wastewater treatment plant and facilities supplies and materials; order, receive and maintain adequate inventory levels of supplies and materials.

Assist in the development and preparation of the annual preliminary budget for wastewater treatment plant operations and activities; review and evaluate budgetary and financial data; control and authorize expenditures in accordance with established limitations.

Communicate with City personnel and various outside agencies to exchange information and resolve issues or concerns.

Operate a computer and assigned software; input data and maintain various automated records and files as directed.

Maintain facilities, systems and equipment in a clean and sanitary condition; assist with cleaning wastewater treatment plants as directed.

Assist with general, streets and grounds maintenance activities as needed; operate snow plows to clear streets of snow as assigned; drive a vehicle to haul and transport supplies and equipment as required.

Assist with coordinating response to emergency situations related to wastewater treatment plant operations as directed.

#### OTHER DUTIES:

Perform related duties as assigned.

#### **KNOWLEDGE AND ABILITIES:**

## KNOWLEDGE OF:

Practices, procedures, methods, supplies and equipment involved in conducting laboratory tests and analyses to identify wastewater quality levels.

Operations, policies and objectives of a wastewater treatment plant.

Operation of DO meters, pH meters, ovens, lab scales, autoclaves, filters, incubators and various other laboratory equipment, instruments and hand tools.

Wastewater sampling and testing techniques.

Principles of chemistry, physics and biology as applied to wastewater treatment plants.

Wastewater treatment plant laboratory practices, procedures and techniques.

Appropriate safety precautions and procedures.

Gauges, meters and other monitoring equipment.

**Updated November 26, 2007 Ewing Consulting Services** 

Principles of training and providing work direction.

Basic budget preparation and control.

Operation of a computer and assigned software.

Oral and written communication skills.

Record-keeping and report preparation techniques.

Mathematic calculations.

## **ABILITY TO:**

Lead and participate in wastewater treatment plant and facilities operations and activities involved in maintaining safe and proper wastewater quality.

Collect samples and conduct lab tests and analyses to identify wastewater quality levels.

Inspect and monitor equipment, gauges and meters to assure proper quality of wastewater.

Train and provide work direction and guidance to assigned personnel.

Oversee and participate in the preparation and maintenance of various records, logs and reports related to samples, readings, results, dates, times, maintenance, repairs and assigned duties.

Operate DO meters, pH meters, ovens, lab scales, autoclaves, filters, incubators and various other laboratory equipment, instruments and hand tools.

Learn, interpret, apply and explain various laws, codes, regulations, policies and procedures.

Interpret and record monitoring equipment and test and analysis results.

Observe health and safety regulations and procedures.

Meet schedules and time lines.

Work independently with little direction.

Prepare and compile various records related to work performed.

Communicate effectively both orally and in writing.

Help foster cooperative and effective working relationships with others.

#### **EDUCATION AND EXPERIENCE:**

Any combination equivalent to: graduation from high school and four years increasingly responsible experience working with wastewater treatment plant and facilities operations and activities to assure safe and proper wastewater quality.

## LICENSES AND OTHER REQUIREMENTS:

Valid California Class B driver's license.

Valid California Wastewater Treatment Plant Operator Grade III certification.

## **WORKING CONDITIONS:**

## **ENVIRONMENT:**

Indoor and outdoor work environment.

Regular exposure to fumes, odors, gases.

Subject to noise from equipment operation.

Seasonal heat and cold or adverse weather conditions.

## PHYSICAL DEMANDS:

Dexterity of hands to operate assigned tools and equipment.

Sitting for extended periods of time.

Seeing to monitor systems and test samples.

Lifting, carrying, pushing or pulling heavy objects as assigned by the position.

Bending at the waist, kneeling or crouching.

Reaching overhead, above the shoulders and horizontally.

Hearing and speaking to exchange information.

# **HAZARDS**:

Working around machinery having moving parts.

Infectious materials from wastewater.

Chemical fumes.